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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,076	08/04/2003	Robert Dean Irwin	DN2002154	5237

27280 7590 06/16/2005

THE GOODYEAR TIRE & RUBBER COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT 823  
1144 EAST MARKET STREET  
AKRON, OH 44316-0001

EXAMINER

HAMILTON, ISAAC N

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/634,076

Applicant(s)

IRWIN ET AL.

Examiner

Isaac N. Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Drawings***

1. The drawings were received on 08/04/03. These drawings are acceptable.

***Specification***

2. Objections to the abstract are hereby withdrawn.

***Claim Objections***

3. Objections to the claims are hereby withdrawn.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the radial axis of the tire" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "the radial axis of the tire" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stashko (4,934,880) in view of Gardner (2,133,613). Stashko discloses cutting head in figures 2 and 3; first axis of rotation 20; blade mounting surfaces 45; blades 60; cavities 40; high speed motor is inherent in an end mill tool; each surface 45 is separated by 60 degrees, which means every alternate surface is 120 degrees apart from the last; distance d is between 20 and 45. Stashko does not disclose a second axis of rotation, however, Gardner teaches second axis of rotation in column 4, lines 13-21. It would have been obvious to provide a second axis of rotation in Stashko as taught by Gardner in order to bore angular holes. Further note that the movement of the cutting head in column 4, lines 13-21, satisfy the limitations of rotatable and pivotable in claims 9 and 10.

Stashko discloses the claimed invention except for a distance d being less than 1 inch and d is 0.5 inches. It would have been an obvious to one of ordinary skill in the art to provide the elements mentioned above for the purpose of maximizing cutting efficiency for different materials, such as, plastic, paper, rubber, wood, cardboard, and metal. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art.

8. Claims 1, 2 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Getts (3,213,716). Getts discloses cutting head 10; first axis of rotation A; blade mounting surfaces 17; blades in figure 4; cavities in figure 7, wherein chips 29 are located; high speed motor is inherent in boring machines; 120 degrees in figure 2; distance d is between A and 17;

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conical in shape 25, 22; largest diameter cutting edge juxtaposed 25 and 22. Getts does not disclose a second axis of rotation, however, Gardner teaches second axis of rotation in column 4, lines 13-21. It would have been obvious to provide a second axis of rotation in Getts as taught by Gardner in order to bore angular holes. Further note that the movement of the cutting head in column 4, lines 13-21, satisfy the limitations of rotatable and pivotable in claims 9 and 10.

Getts discloses the claimed invention except for a distance  $d$  being less than 1 inch,  $d$  is 0.5 inches, and an edge diameter of 0.75 inches. It would have been an obvious to one of ordinary skill in the art to provide the elements mentioned above for the purpose of maximizing cutting efficiency for different materials, such as, plastic, paper, rubber, wood, cardboard, and metal. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. Such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac Hamilton whose telephone number is 571-272-4509. The examiner can normally be reached on Monday through Friday between 8am and 5pm.

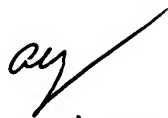
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



IH

June 13, 2005



Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700